



DEPARTMENT OF COMMERCE UNITED STATE **Patent and Trademark Office**

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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. **FILING DATE** APPLICATION NO.

HM22/0929

EXAMINER LEFFERS JR,G

PETER F CORLESS DIKE BRONSTEIN ROBERTS & CUSHMAN 130 WATER STREET BOSTON MA 02109

PAPER NUMBER **ART UNIT** 1636

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DATE MAILED:

09/29/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/187,669 Applicances)*

Marban, Eduardo

Examiner

Gerald G. Leffers Jr.

Group Art Unit 1636



Responsive to communication(s) filed on	·
This action is FINAL.	
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is so sometimes from the mailing date of this communication. Failing polication to become abandoned. (35 U.S.C. § 133). Extends CFR 1.136(a).	et to expire <u>one</u> month(s), or thirty days, whichever ure to respond within the period for response will cause the ensions of time may be obtained under the provisions of
Disposition of Claims	is/ore conding in the application
	is/are pending in the application.
	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
Claim(s)	is/are rejected.
Claim(s)	is/are objected to.
	are subject to restriction or election requirement.
See the attached Notice of Draftsperson's Patent Dra ☐ The drawing(s) filed on	bjected to by the Examiner. isapproveddisapproved. er. ority under 35 U.S.C. § 119(a)-(d). ies of the priority documents have been I Number) the International Bureau (PCT Rule 17.2(a)).
Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Page Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PT Notice of Informal Patent Application, PTO-152	per No(s)
SEE OFFICE ACTION	ON THE FOLLOWING PAGES

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DETAILED ACTION

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-15, 29-31, drawn to methods of detecting potential drug targets and predicting the effects of candidate drug compounds, classified in class 435, subclasses 6, 463.
- II. Claims 16-28, drawn to modifying the conducting properties of an ion channel to determine its capacity as a drug target or its capability to reproduce a cardiac arrhythmia phenotype in culture, classified in class 435, subclasses 375, 6, 463.

The inventions are distinct, each from the other because of the following reasons:

The inventions of Groups I-II are biologically and functionally different and distinct from each other and thus one does not render the other obvious. The methods of Group II comprise steps which are not required for or present in the steps of the Group I: modification of a nucleic acid segment encoding an ion channel protein and detection of an altered ion current due to expression of an altered ion channel (Group II). The end results of the methods of the two Groups are different: detection of potential drug targets and prediction of the effects of candidate drug compounds against potential drug targets (Group I) and modification of the properties of an ion channel in order to determine its suitability as a drug target and to reproduce a cardiac arrhythmia phenotype (Group II). Thus, the operation, function and effects of these different

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methods are different and distinct from each other. Therefore, the inventions of these different, distinct groups are capable of supporting separate patents.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and because the non-patent literature search required for Group II is not required for Group I (e.g. ion channel proteins, cardiac arrhythmia, etc.), restriction for examination purposes as indicated is proper.

A telephone call was made to Peter Corless on 7/20/00 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Conclusion

Certain papers related to this application may be submitted to Art Unit 1636 by facsimile transmission. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. § 1.6(d)). The official fax telephone numbers for the Group are (703) 308-4242 and (703) 305-3014. NOTE: If Applicant *does* submit a paper by fax, the original signed copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

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. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Leffers, Jr. whose telephone number is (703) 308-6232. The examiner can normally be reached on Monday through Friday, from about 9:00 AM to about 5:30 PM. A phone message left at this number will be responded to as soon as possible (usually no later than 24 hours after receipt by the examiner).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. George Elliott, can be reached on (703) 308-4003.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

DAVID GUZO

G. Leffers, Jr.

Patent Examiner

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September 27, 2000